

H'A

Notice of Allowability	Application No.	Applicant(s)	
	10/786,488	YAGI, SEIICHIRO	
	Examiner	Art Unit	
	Jacob Y. Choi	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/12/2006.
2. ☒ The allowed claim(s) is/are 1 and 3-5.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 12, 2006 has been entered.

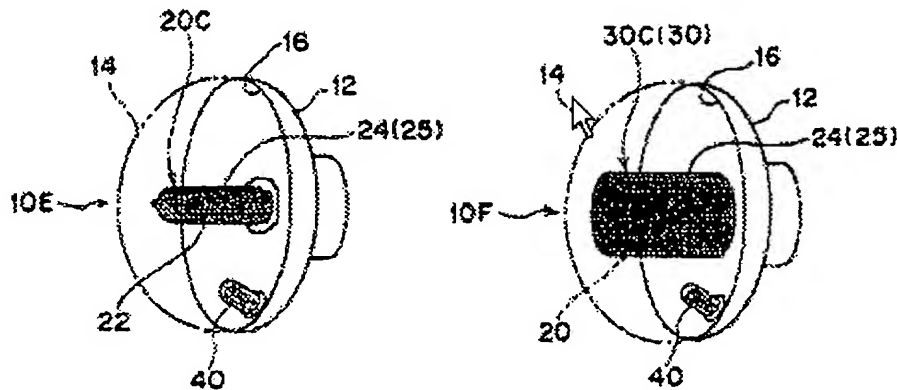
Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance: the claim, independent claim No. 1, recites "*A vehicle headlamp used for a vehicle, comprising: an infrared light source for generating red light and infrared light, wherein the infrared light source comprises a semiconductor infrared light emitting element for generating red light and infrared light; a visible light source for generating visible light, wherein the visible light source comprises a semiconductor light emitting element which emits light having wavelengths different from that of said red light; an optical system for directing said red light and visible light towards a substantially same emission area in front of said vehicle; and a lighting circuit for turning on said infrared light and visible light sources with strength in order that chromaticity in said emission area based on said red light and visible light can correspond to white light with a predetermined range in chromaticity*

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coordinates, wherein the optical system comprises a reflector for reflecting the light emitting from the infrared light source and the light emitted from the visible light emitting element towards the substantially same emitting area in front of the vehicle, and wherein the infrared light source and the visible light source are located in the vicinity of a common focal point of the reflector."

Kobayashi et al. (USPN 6,601,980) teaches an infrared light source (e.g., 24) for generating red light and infrared light, a visible light source (e.g., 40) for generating visible light, of which wavelength is different from that of the red light, an optical system (e.g., 10E or 10F) for emitting the red light and visible light towards a substantially same emission area in front of the vehicle (abstract; *"the infrared rays radiated from the infrared-ray radiation means and the visible rays radiated from the visible-ray radiation means are emanated from the front lens simultaneously when the lamp is lit ... etc."*), and a lighting circuit for turning on the infrared light and visible light sources (e.g., columns 5-6, lines 55-20; *"... the entire lamp is controlled by a lighting control circuit provided with a vehicle speed sensor ... etc."*) with strength in order that chromaticity in the emission area based on the red light and visible light can correspond to white light within a predetermined range in chromaticity coordinates (e.g., Figures 3, 5, 14).



Applicant's arguments, see pages 4-8, filed June 12, 2006, with respect to claims 1 and 3-5 have been fully considered and are persuasive (e.g., "...a control circuit the strength of the infrared light emitted from the infrared light source and the visible light emitted from the visible light source. Both of the light sources are located in the vicinity of the focal point of the lamp's reflector. The strength of each lighting source may be controlled such that when the two lights are mixed, the combined light would result in a predetermined chromaticity ... the visible light may be of a wavelength complement to the red (e.g. cyan) so that when the red light and the complement visible combine, a white light is generated ... etc."). The claim rejections under 35 USC § 103 of January 12, 2006 have been withdrawn. Because none of the references disclose the details of the infrared light semiconductor and visible light semiconductor located in the vicinity of a common focal point of the vehicle reflector, wherein the lighting circuit adjusting its light strength in order to produce white light, nor is there any motivation to combine them, the claims are deemed patentable over the prior art of record.

3. Claims 1 and 3-5 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Amendment

4. Examiner acknowledges that the applicant has amended/incorporated parts of dependent claims 2 and 6 into the independent form. Claims 1 and 5 are amended and canceled claims 2 and 6.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Holz et al. (USPN 6,877,879) – process for improving the visibility in vehicles

Ishida (US 2005/0018446) – vehicular lamp and light source module

Ishida et al. (US 2004/0233678) – vehicular lamp

Sazuka et al. (US 2005/0018445) – vehicular lamp and light source module


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y. Choi whose telephone number is (571) 272-2367. The examiner can normally be reached on Monday-Friday (10:00-7:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC



Sandra O'Shea
Supervisory Patent Examiner
Technology Center 2800